

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Please replace paragraphs 007 and 008 with the following paragraphs:

[007] In the CIM model, only associations have knowledge of relationships between classes. With reference to Figure 1, only association 160 has knowledge that subclass 150 is related to subclass 140 via references 165 and 167, respectively. Subclasses Subclass 140 and 150, however, have has no information indicating to either association 160 or subclass 150. Likewise, subclass 150 has no reference to either association 160 or subclass 140.

[008] While Figure 1 illustrates subclasses dependent upon a base class, other objects may be defined as well. For example, an instance may be defined that also inherits characteristics from an object it depends upon. An instance is a representation of a managed object that belongs to a particular class, or occurrence of an event. That is, an instance of a class includes real data that relates to a real world managed object. For example, suppose class 110 represents a class labeled CAR, and includes the inherent base characteristics for such a class. An instance of class 110 may represent, for example, a car driven by a particular driver. Another instance may represent a particular make of the car class 110. As described, objects such as instances are defined dynamically as the CIM schema grows. Each time an object is defined, any relationships between the newly object defined object and existing objects are generally maintained in the form of an association.

Please replace paragraph 042 with the following paragraph:

[042] Although Figure 3 shows a network interconnecting JVM 330 and clients 320, it is understood that clients 320 and JVM 330 may be implemented in common system environment that does not require a network for the exchange of information. Furthermore, clients may include processes operating within the common system environment. Additionally, it should be understood that features and principles of the present invention need not be implemented as depicted in Figure 3. That is, the repository 350 and Object Manager 340 shown in Figure 3, are exemplary and is are not intended to be limiting. For example, the repository 350 and object manager 340 need not be implemented with a virtual machine or a CIM environment, but may operate with other types of object-oriented processes that operate in a manner consistent with features and principles of the present invention.

Please replace paragraph 043 with the following paragraph:

[043] Figure 4 shows an exemplary block diagram of repository 350. As shown, repository 350 contains a plurality of defined objects 420, 450. In Figure 4, the objects represented are instances 450A-450J of a first class defined in repository 350. Instances 420A and 420B, for exemplary purposes, represent instances of a second class defined in repository 350. Each instance may be associated with an association 430 that represents a relationship between objects. For example, instances 420A and instance 450A have an association 430-1 establishing a relationship between these two objects. Associations 430 are considered classes in the CIM, and provide links 460 (represented as solid line arrows) to an object, such as instance 420 or instance 450. Each association class in turn may have instances defined as well. Thus, the associations 430 shown in Figure 4, may represent instances of a single association class. Links 460 point to instances and reflect a relationship between them. For example, instance 450A and instance 450F have a defined association 430-2 between them. Link 460-1 defines a reference from association 430-2 to instance 450A, and link 460-2 defines a reference from the association 430-2 to instance 450F. Repository 350 also includes wrappers 410 for each instance, 420 and 450. Each Wrappers wrapper 410 are is a locally maintained tables table that are is specific to an instance it "wraps." As shown in Figure 4, each wrapper (depicted as the shaded area surrounding an instance) "wraps" around an instance 420 or instance 450. These wrappers may also be referred to as instance wrappers. Wrappers 410 will be described in further detail below with respect to Figures 5A-5D and 6A-6E.

Please replace paragraph 046 with the following paragraph:

[046] Figure 5A shows a CIM model similar to that represented in Figure 2. That is, the model includes instances of various classes, represented by instances 510 (I-5), 520 (I-1), 530 (I-2), 540 (I-3) and 550 (I-4), and associations 515 (A-1), ~~522~~ 523 (A-2), 524 (A-3) and 526 (A-4). Also included in the model illustrated in Figure 5A, are wrappers associated with each instance. Specifically, instance wrapper 512 is associated with instance 510 (I-5), instance wrapper ~~523~~ 522 is associated with instance 520 (I-1), instance wrapper 532 is associated with instance 530 (I-2), instance wrapper 542 is associated with instance 540 (I-3) and instance wrapper 552 is associated with instance 550 (I-4). The wrappers shown in Figure 5A are depicted in detail in Figure 5B.

Please replace paragraph 047 with the following paragraph:

[047] Figure 5B shows repository 350 containing the wrappers, or wrapper tables, associated with each instance illustrated in Figure 5A. As shown, instance 5 wrapper table is related to wrapper 512 in Figure 5A, while the instance wrapper tables [[I-4]] 1-4 correlate to the instance wrappers ~~523~~ 522, 532, 542 and 552 in Figure 5A, respectively. Each wrapper table includes a reference to an association instance that has been defined for its respective instance, depending upon the representation of the wrapper. That is, instance 5 wrapper table is defined for instance 510 (I-5) in Figure 5A, and any associations defined for that instance will be represented in its wrapper table. Instance 5 wrapper table includes association 515, labeled A-1, corresponding to the relationship depicted in Figure 5A. Also included in each wrapper table are reverse links established for each relationship with the association listed in a respective wrapper. Again referring to the instance 5 wrapper table, and Figure 5A, it can be seen that association A-1 defines a relationship between instance I-5 of class 1 and instance I-1 of class 2. Accordingly, instance 5 wrapper table also defines the relationship of association A-1 with instance I-1. As there are no other associations defined for instance I-5, the remainder of its wrapper table is empty.

Please replace paragraph 061 with the following paragraph:

[061] To illustrate the dynamic management of the wrapper table of this aspect of the invention, Figure 6D shows new instance objects 670 and 680 added to the CIM of Figure 6A. These new objects may be added using the same client request process described for the aspect of the present invention illustrated in Figures 5A-5E and 7. That is, a client 320 may initiate a request to create a new instance of class 5 (I-1 of C-5) in repository 350. Once CIM object manager 340 defines the new instance, an association instance is formed, based on the characteristics of instance 1-4 of C-5. In this case, ~~an~~ a new association class instance AC4-1 of association class AC4 is defined, that relates instances 680 and 622.